

# AMATEUR RADIO



Published in the interests of the Wireless  
Institute of Australia, Official Organ of all  
divisions of the W.I.A. and R.A.A.F.W.R.



PRICE

6<sup>d</sup>

APRIL 1938

*Submit Your Instrument Problems  
to us*



# **SIEMENS-ELLIOTT**

## **INSTRUMENTS**

*For Every Requirement*

---

**SIEMENS (Australia) Pty. Ltd.**

SYDNEY      MELBOURNE      BRISBANE      ADELAIDE  
NEWCASTLE

H. G. Little & Co. Perth:      W. & G. Genders Pty. Ltd. Tasmania



Agents for THE ENGLISH ELECTRIC CO. LTD., LONDON

# AMATEUR RADIO

Published by the Wireless Institute of Aust., Victorian Division.

Vol. 6 No. 4

1st APRIL, 1938.

## INDEX

Editorial .....	3	28 and 56 M.C. Notes .....	16
Putting the D.C. Mains to Work .....	5	QSL Bureau .....	18
Sunspot Phenomena .....	8	DX Notes .....	19
Air Raider's Column .....	11	Divisional Notes—	
Arrangements for 14th Annual Convention, Sydney, 1938 .....	13	N.S.W. Division .....	21
Correspondence .....	14	Victorian Division .....	22
Victorian Northern Zone Phone Section .....	15	Queensland Division .....	24
		South Australian Division .....	25
		Tasmanian Division .....	28
		R.A.A.F. Reserve Notes .....	C.3

## Divisional Addresses:-

FEDERAL HEADQUARTERS .. . . . . BOX 2127L, G.P.O., SYDNEY  
NEW SOUTH WALES .. . . . . BOX 1734JJ, G.P.O., SYDNEY  
VICTORIA .. . . . . BOX 2611W, G.P.O., MELBOURNE  
QUEENSLAND .. . . . . BOX 1524V, G.P.O., BRISBANE  
SOUTH AUSTRALIA .. . . . . BOX 284D, G.P.O., ADELAIDE  
WEST AUSTRALIA .. . . . . 62 SUBIACO ROAD, SUBIACO  
TASMANIA .. . . . . BOX 547E, G.P.O., HOBART

## Magazine Committee:-

Editor—W. R. GRONOW (VK3WG).  
Technical Editor—R. H. CUNNINGHAM (VK3ML); Notes—C. SERLE (VK3RX);  
Compilation—V. E. MARSHALL (VK3UK);  
Secretary—T. POWERS (VK3PS)

All Communications and MSS. should be forwarded to the Editor, "Amateur Radio," BOX 2611W, G.P.O., MELBOURNE.

Subscription to "Amateur Radio" is 6/- per Annum (Post Free), paid in advance.

Should you not receive your copy of "Amateur Radio," notify your Divisional Secretary at once.

Advertising and Publishing Office: Address Publicity Manager, "Amateur Radio," Whitehorse Road, Box Hill, E.11. 'Phone: WX 2429.

NOTE.—ADVERTISERS' CHANGE OF COPY MUST BE IN HAND NOT LATER THAN THE 20th OF THE MONTH PRECEDING PUBLICATION.

**370 LITTLE COLLINS STREET - - - - MELBOURNE**

**YES!**

**It's Australasian Engineering  
Equipment's New Showrooms.**

**REDUCTION  
T.C.C. TRANSMITTING  
CONDENSERS**

Type.	Capacity.	Working Voltage.	Net Price.
111	1 mf.	1000 Volts	11/6
111	2 mf.	1000 Volts	15/-
111	4 mf.	1000 Volts	25/-
121	1 mf.	1500 Volts	15/-
121	2 mf.	1500 Volts	25/-
121	4 mf.	1500 Volts	30/-
131	1 mf.	2000 Volts	21/-
131	2 mf.	2000 Volts	30/-
131	4 mf.	2000 Volts	37/6
141	1 mf.	2500 Volts	32/6
141	2 mf.	2500 Volts	60/-
141	4 mf.	2500 Volts	100/-

All T.C.C. Condensers are Guaranteed to Stand Up to their Working Voltage Continuously. Featuring JELLY FILLED Compound which is SUPERIOR to Oil Filled Condensers.

**KEN-RAD ——— VALVES  
BIRN BACH ——— INSULATORS  
BRUNO ——— MICROPHONES  
STEDIPOWER ——— CARBON GRANULES**

**We Stock All Types of Radio Components.**

**A.E.E. Co. Pty. Ltd.**

**370 LITTLE COLLINS STREET - - - - MELBOURNE**  
**(Next Door Wattle Tea Rooms)**



## EDITORIAL ~

We had been turning over in our minds the possibilities that "Amateur Radio" offered to publicise the Institute and had almost decided to hold the matter over until after the Federal Convention when we came upon the following paragraph from the Editorial page of an English Aviation Monthly:—

"Here we sit looking about as ferocious as Mary's pet lamb, yet with so many teeth, claws and stings hidden under our wool that it is hard to move without showing some of them—even a rattle-wobbles its rattles before it strikes. It is time we rattled ours."

The Editor was emphasising the fact that Britain's hush-hush policy towards her rearmament programme was one of the main causes of her being under-rated in Europe. A little publicity and—

But it is not the position of Britain and Europe that concerns us now, but the parallel that can be drawn for our own particular case. If you or I have something that other people have not, or something better than what they possess we can only expect to command their respect for our wares if we advertise them. The part of the above quotation that commands our notice is the last sentence, "It is time we rattled ours." The Institute's policy is certainly not one of aggression, we have nothing to be aggressive about at the moment, but the value of Institute membership can be very much under-rated unless due publicity of the right kind is forthcoming. A Ham the other day gave us what, to him, was a stern indictment of what was wrong with the Institute. "It is too darned self-complacent," he said. Because the W.I.A. did not blatantly cry aloud what it had to offer, he thought it must consider its policy and organisation perfect and its attitude one of

which a non-member could join if he wished, but if he didn't, he was the loser, not the Institute; in any case it was only his sub. they wanted. We asked him what he knew of the organisation of his Division and found it amounted to very little beyond hearsay.

You know as well as we do that his criticisms were illogical and wrong, but neither you nor we can escape the blame that is attachable to us for the lack of publicity that was responsible for this and other men's misconception. Our Ham's criticism of "self-complacency" can be turned as a direct indictment of himself as a non-member, for it is the absolute truth that the officers of the W.I.A. in the various Divisions work too hard in the interests of Ham Radio, member and non-member alike, to have either the time or, for that matter, the inclination to brag of what they have done and are continually doing. That is where "Amateur Radio" comes into the picture. The Editorial from which we have quoted has a note of challenge in its theme "It is time we rattled ours." Yes, and "Amateur Radio" is the logical medium of the W.I.A. to start the "rattling"!

We know what you members are thinking and we agree that, on the surface, any Ham who will accept the benefits that the Institute strives for and obtains, without offering to pull his weight, is a miserable sort of Ham indeed. But look at it from the other angle. Many Hams do not regard their hobby as something altogether on a different plane from their business lives. To some it is due to their native shrewdness (?) that they can obtain for themselves these benefits without paying for them in money or work. To others comes a sense of injury and insult that the Institute has dared not to

plead with them to join, "I would join if I were asked," they say. A little paltry isn't it, but it takes many types to make a world. A little understanding, a little well directed publicity and perhaps those Hams would become useful Institute members. Finally there is that other type that our critic mentioned, who says that the W.I.A. is "only after my sub." That makes one's blood boil doesn't it, and calls for the immediate retort, "We've run the Institute successfully without it in the past, my friend, and can continue to do so in the future." But before replying think if the remark is not a result of a misunderstanding of the Institute's policy—perhaps of lack of publicity of our organisation. Of course if he is the type who regards the payment of his sub. as he would regard the purchase of a sack of potatoes, as purely a commercial proposition, tell him he has knocked at the wrong door, for Ham Radio is, or should be, a haven and a relaxation from all that is commercial. The Institute is a business trading in goodwill and goodfellowship and ten times one's sub wont buy either. Above all else we must emphasise the definite honour that is attached to Institute membership. The W.I.A. has a magnificent record of achievement behind it, one of its Divisions is the second oldest in the world, its members have built and are still building up a tradition as noble as any our hobby has known. Where in the scroll of Fame can you find a record finer than that of our Hull's, our Maclurcan's, our Howden's, and others too numerous to mention? Their imperishable record provides part of our tradition, our background and our pride. To be a member as they were members, to be privileged to work for our hobby as they worked is an honour indeed.

But to return to the subject of publicity and the part that "Amateur Radio" and the W.I.A. can play. This month in Sydney will be held one of the most representative conventions in the history of the Institute inasmuch as every State Division will be represented and will officially take part in Sydney's Sesqui-Centenary Celebrations and will amplify the Institute's part in the above celebrations. The May issue will be a special Convention Number

dealing almost totally with the Federal aspect of the W.I.A..

We have a wonderful organisation in the Wireless Institute of Australia with a magnificent record of which we are justly proud, and it is our duty to publicise its activities.

## The Australian National Field Day 1937

Congratulations to 3UK on winning the 1937 N.F.D. Contest.

With 230 points 3UK was well clear from 2LR, 193, and 3ML, 184, third. 3UK's performance in contacting all continents except South America in 24 hours with a portable outfit was exceptionally good.

Conditions generally were very poor, the weather in N.S.W. being exceptionally unpleasant for camping in the countryside.

2HZ and party were practically washed out on several occasions, the antenna being put up the 90 ft. pine tree in a thunderstorm.

2RA and party at Mt. Tomah, Blue Mountains, were shrouded in a mountain mist all the time, and at times, rain during the contest.

The Lakemba Radio Club's party using call sign 2LR were the winners in N.S.W. 3ML, the other high scorer with 2BP as second op., used B batteries for power, a stack 6ft. x 3ft. x 3ft. being the source.

The number of entrants was disappointing, but as an approximate total of 80 hams participated in the field that is what really counts. We hope it is 80 portable stations next year.

The scores are as follows:—  
Australian National Field Day.  
Results:—

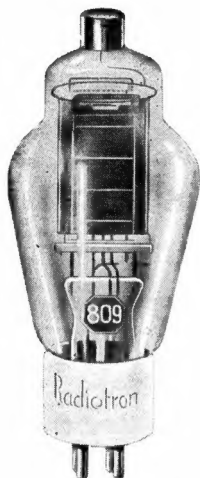
1.	VK3UK . . .	230
2.	VK2LR . . .	193
3.	VK3ML . . .	184
4.	VK2PN . . .	174
5.	VK2RA . . .	120
6.	VK5ZX . . .	118
7.	VK4HR . . .	80
8.	VK4AW . . .	53
9.	VK2AHB . . .	39
10.	VK2ZB . . .	34
°	VK2HZ . . .	172

°Non-Competitor.



# RADIOTRON 809

*for ultra high frequency*



## FEATURES:

Ultra High Frequency operation. Full ratings up to 60 M.C. Ceramic base for low losses. Plate brought out at top of bulb for high insulation.

High Filament emission. High Plate efficiency. High Amplification factor. Low driving power.

Suitable for Class "B" Audio Amplifier or Modulator. High "mu" and low bias.

At a price of 25/- nett Radiotron 809 gives MORE WATTS FOR YOUR MONEY.

Ratings—Class "C" Telegraphy.

Filament (max.) .....	6.3 volts	2.5 amp.
Plate Voltage (max.) .....	750 volts	
Plate Current (max.) .....	100 mA.	
Plate Dissipation (max.) .....	25 W.	
Typical Power Output .....	55 W.	

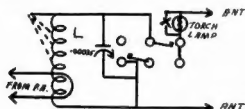
Price **25'** - nett.

# RADIOTRONS



short out the unwanted turns. By this method it is easy to get the correct match for the P.A. depending on the frequency in use. The torch lamp in the feeder needs a short placing across it to prevent it blowing out. An 0-1 RF ammeter would do nicely here, but when costs are being considered the Torch lamp does the job as well.

Getting the oscillator started calls for a little experimenting, but once it starts off the use of same is very easy. With the 40 metre coil plugged in L1 and the condenser marked C screwed right out, switch



**Antenna Tuning Unit.**

on the plate supply to the oscillator, which should be around the 30 M.A. mark with the oscillator off resonance. Screw in the condenser marked C until the meter begins to show a drop in the reading, and then tune as a conventional crystal oscillator. The adjustment of the condenser C is the heart of this circuit, and if carried too far it will function self excited. This will be indicated by a continuous light in a test loop held over the coil L1 and the condenser C1 rotated. It is advisable to check each harmonic with a wave meter to see that it is the correct one, and not one that falls outside the amateur bands. The same procedure applies in getting the oscillator to function on 20, but once it is working it is an easy job to return to the original settings.

Keying is accomplished in the cathode of the buffer. By keying here all back waves, etc., are eliminated from the radiated signal, and the use of a 500,000 Ohm resistor across the key will eliminate any clicks or sparking that may originate at the key, the P.A. being biased to cut off immediately falls to zero when the key is up, a 45 volt heavy duty B

battery just cuts the power amp off nicely.

The coils L1, L2, L3 are wound on 1½ in. diameter 5 pin coil formers. The link around L2 and L3 is a single turn of number 14, soldered to the two spare connections on the socket and expanded enough to allow the coil to be slipped in and out without any loss of time when band changing. The P.A. plate coils are wound with number 14 tinned copper wire on celluloid strips. This method of coil winding is dealt with fully in the latest A.R.R.L. handbook, but a simple dope can be made from Duco thinners and small pieces of celluloid allowed dissolve in same. "Facinac" thinners seems to be the most speedy at dissolving the celluloid, much quicker than Acetone or Amyl-acetate.

No details have been given for coils for the 80-metre band, as operation on this band was not desired, but by doubling the number of turns for 40 and a little cut and try, 80 should present no difficulties.

If it is also intended to modulate this rig after the probationary period has been served, the suggested line up for a modulation unit is as follows:—CC1, Push Pull EL2's and Cascade CL4's.

The condenser marked C11 is a home-made one. It is a .0005 with alternate plates removed, and the capacity is in vicinity of 100 mmfd. after the alterations. However, there are some really good double spaced 100 mmfd. condensers on the market now which should do a 100 per cent. job in this position. It is essential that a double spaced condenser be used here as the single spaced varieties spark over between the plates on every press of the key.

	L1	L2	L3	L4
40	12	16	24	14
20	6	8	10	6

L1, L2, wound on 1½ in. formers with 18 DCC spaced one diameter between turns; L3 wound on 1½ in. former close wound with 18 DCC.

L4 wound with 14 tinned copper spaced one diameter, 2 in. in diameter and supported with celluloid strips.

(Continued on page 17.)

## Sunspot Phenomena

By E. H. Cox (VK2GU)

Intense eruptive activity on the sun, which accompanied the appearance of an abnormally large sunspot in the second half of January, provided an unusually complete opportunity to observe the correlation between solar phenomena and high frequency radio propagation over distances. During the period in which the sunspot was moving across the sun's disc at least two major complete fade-outs, each of more than two hours' duration, were observed in Australia, together with a number of minor fades, and a number of other interesting effects, some of which will be described. Most of these notes are based on observations on the 28MC band.

On the morning of January 13, a complete fade-out, lasting approximately 45 minutes, occurred on the 28MC band. Signals from the United States of America were received normally up to about 8.45 Australian eastern standard time. Within a period of about five minutes, the band became absolutely dead, and a check showed that there had been a disappearance of the harmonic radiations from Japanese stations, which are normally audible on about 28MC at that time. At 9.30 the fading period ended, and signals came through faintly, building to about an average level for the time of the year over a period of about 30 minutes. From 10.00 onwards until North American signals disappeared about 13.00, the band was normal, but with a very marked and rather sudden "peaking" of 10,000 mile skip signals about 11.00. On this date, the large sunspot was on the extreme western edge of the solar disc, and its appearance was not publicly announced by the Commonwealth solar observatory until the following day, when several excellent photographs were made.

On January 16, there was another fade-out of unusual severity and duration, which will be remembered as having disrupted communications on

all bands for more than two hours. On the 28MC band, it was immediately preceded by conditions rather better than those normal in mid-summer. Signals from all parts of the United States were being received at good strength, while those from the American east coast were considerably above normal strength. At 10.43 Australian eastern standard time, while the writer was in communication with W2KAK, near New York City, the signals from that station dropped from a level approaching a maximum for the station to complete inaudibility in less than three minutes. Within four minutes of the beginning of the fade-out all trace of signals from all sources had disappeared. It was distinctly noticeable that the signals from stations on the west coast of the United States were the first completely to disappear, while the last signals recognisable before the fade-out became complete were those on the extreme east of the continent.

At 10.55, or about ten minutes after the fade-out became complete, the writer observed the "hiss" which has frequently been described in ten metre communication. The intensity of the "hiss" on this occasion was greater than it has ever been heard before, and it would have been sufficient to drown all but the loudest signals. It developed suddenly, rising to the maximum intensity attained in a period of probably 30 seconds. It persisted at this level for about six minutes, and then disappeared almost as suddenly as it had begun. Careful checks were made to ensure that it was being picked up via the antenna. The receiver in use is particularly well shielded for use for duplex operation, and was found to be completely silent whenever the antenna was disconnected.

It has several times been suggested that this "hiss" may be cosmic in its origin. Its appearance immediately following a complete fade-out lends partial support to this view.

At such a time, the disappearance of ionisation strata in both the E and F regions should facilitate the admittance to the surface of the earth of external radiations which these strata would normally tend to exclude. On the other hand, there was no reformation of the strata in the E or F regions throughout the period of the fade-out, and it would therefore be expected that if developed in some "constant output" cosmic source, the hiss would have persisted through the whole period of the fade-out. An alternative explanation of the "ten metre hiss" which seems much more consistent with the observations on this occasion is that it is generated by some form of electrical disturbance in the extreme upper atmosphere. Such disturbances might well be expected to result from the abrupt change in the electrical conditions of the upper atmosphere at the inception of the fade-out, and it is easy to conceive the condition generating the "hiss" as a transitory one which need not persist throughout the whole of the fade-out period.

Careful checks were kept on the 14MC as well as the 28MC band throughout the fade-out, and it was noted that signals first reappeared on the higher frequencies. The first weak signals to be heard on 28MC reappeared at 12.55, and were from stations on the west coast of America and in the Hawaiian group. Harmonics from Japanese commercial stations became audible about ten minutes later. The first signals to reappear on the 14MC band were not audible to the writer until about 13.25 Australian eastern standard time, or about 30 minutes after the first reappearance of signals on 28MC.

A check with Hawaiian stations immediately after communication was restored revealed that the fade-out was markedly noticed on the islands and on the western coast of the United States, but with the important difference that, between the mainland and Hawaii, the band, though unfit for communication, was not completely "dead." At intervals throughout the fade-out period very weak signals broke through between the American mainland and the islands, but were audible for only

short periods before disappearing. No corresponding brief reappearances of signals were detected at the writer's station. It is to be observed, however, that over the American-Hawaiian signal path, the fade-out occurred in the late afternoon. At such a time the incidence of solar radiation over this segment would be oblique. In such circumstances it would be expected that the disturbing influence of abnormalities of solar radiation on the normal structure of the ionosphere would be reduced. This is consistent with the repeated brief reappearance of signals between the United States and the islands. It is consistent also with a further effect reported to the writer from Hawaii—namely the restoration of normal communication channels between America and the islands at least half an hour before communication from Australia to the islands became practicable.

On the occasion of this fade-out, it is learned, through the courtesy of the authorities of the Commonwealth Solar Observatory at Mount Stromlo, that the ionosphere record there revealed a disappearance of "echoes" over a vertical path simultaneously with the disappearance of the long distance signals. There was also a close agreement between the reappearance of "long skip" signals, and of vertical echoes, though, of course, the maximum or "critical" frequency of the echo signals was much lower than that of the first long distance signals to reappear.

Fade-outs of this character appear invariably to accompany hydrogen eruptions on the sun. On this occasion, however, the sun was heavily clouded, and it is believed that no visual observations were anywhere possible during the fade-out period.

In the week following this fade-out, an interesting effect, which, possibly, was fortitious, was noticed on the 28MC band. Throughout the period, the band was "patchy," but it was less so when the sunspot was on or near the sun's meridian than when it was near the sun's rim. There was a general improvement in conditions on the ten metre band up to about January 20, after which the band again deteriorated. During

the whole of this period, communication conditions on ten metres appeared to be fairly normal for distances up to about 7000 miles, but for greater distances the frequency was extremely unreliable. After January 20 a deterioration of conditions set in, and continued progressively until January 26. On the afternoon of January 24, there was another complete "fade-out" of even longer duration than that of January 16. It began about 14.00, and, according to information received by the writer, persisted until about 17.00 Australian eastern standard time. This fade-out definitely accompanied a large solar eruption, which was observable. No opportunity was available here to make any observations on the 10 metre band.

Another effect of considerable interest, possibly associated with the eruption on January 24, was observed on January 26. On that day, throughout the whole of the morning and early afternoon, no signals of any kind were audible on the 28MC band. This is the first occasion, to the writer's knowledge, since September, 1936, on which the band has been wholly closed to signals from America for the whole of a day. It was learned subsequently that the echo record at Mount Stromlo on this day revealed quite normal ionisation conditions in the E region, but an unusually low ionisation density throughout the day in the F region. The day's record was described as a wholly abnormal one. Throughout the day, signals were observable on frequencies up to about 17MC, apparently provided by the E region ionisation, but the non-appearance of signals on 28MC seems to suggest clearly that these are not normally propagated from the E region, but are dependent on F region ionisation.

It is interesting to observe that the complete fade-out of the ten-metre band for the whole of the morning of January 26 coincided almost exactly in time with an unusually brilliant display of the Aurora Borealis in Europe. The correspondence may have been fortuitous, but it seems probable that both were associated with the solar eruption and the "all bands" fade-out on January 24. It has already been well estab-

lished that auroral displays frequently follow intense solar eruptions, generally by a period between one and two days. The time of the auroral display referred to, and of the simultaneous failure of the 28MC band, is in good agreement with this experience.

A fade-out which occurred on the morning of February 3 simultaneously with the eruption of a minor sunspot provided still further evidence of the importance of ionisation in the F regions, rather than the much lower E regions as the mechanism of propagation of 28MC signals over long distances. The writer was not able to observe the beginning of this fade, but observations made in the middle of the fade period showed that signals from North American stations on the 28MC band were reaching Australia at just audible strength. No signals could be observed on the lower frequencies. He was informed that the echo record showed a complete disappearance of ionisation in the E region, but traces of ionisation in the F2 region with an abnormally low frequency for penetration at normal incidence persisted through the period. The fade-out began to pass about 93.0, and as in the case of that on the morning of January 13, the period between first signs of improvement and restoration of normal propagation conditions on 28MC was about 30 minutes.

American reports revealed that no signs of this fade-out were noticed in the Eastern States of America, and that normal communication was permissible throughout the period of disruption in Australia over paths within the North American continent. This result agrees generally with that in the major fade on January 16. Solar radiation over the North American continent during the fade would be oblique and therefore less disturbing in its effect on the ionosphere than over the Pacific Ocean.

Taken generally, the results seem to have a slight bearing on the possibilities of five metre communication over extra optical distances. They do not seem to disturb the

(Continued on page 17.)

## Air Raiders Column

**3VB.**—Say, O.M., how do you expect to raise your DX with a lousy A.C. signal like that? Besides, it's wandering all over the band; better put a weight on it, or else use an xtal.

**3ZP.**—It's time you got rid of that piece of rock that's about 8 KC. outside the 14 MC. band. I've yet to hear you work anything with it.

**3JB.**—You have a 449 harmonic on 14 MC. Thought you were a bit of DX atfirst, and wasted time waiting to call you.

**3LX.**—Not satisfied with putting out rotten fone sigs., he goes and shorts out all filters, and comes on with a note that sound like a "raspberry." I heard W8AIE give you TTX; he was generous! You must have a swag of screw drivers there, O.M.

**5GM.**—"The whistling baritone," you ought to hear him giving us the whistle before calling CQ, and in the background can be heard female voices. All this on 14 MC., too! Try some canary seed, O.M.!

**3KC.**—Wot a beautiful ripply splashy note this guy imposes on the air. Sounds like a self excited rig used by Noah! It only takes up about 20 KC., and that's saying something. You want to modulate now, O.M! Ahem!

**2AHA.**—Has a O.C. xtal note, these lousy guys who think they can cut a

a few decent T9 sigs. out. These A.C. sigs. seem to be the craze for 1938; suppose these outlaws will be back to the old "spark" coils next year! Lawd help us!

**1DO.**—Nice T9 sig., O.M., but a bad tail on it, cut it off.

**3FM.** Using fone on 7 MC., and by the sound of his speech, the mike must be an old P.M.G. job filled with coke. What a big difference in your fone and 3AS's. Next time you QSO him get the low-down on good fone!

**2AGU.**—Has distorted fone sigs., probably over modulated, nearly as bad as 4JU and 3LA! What say, O.M.?

I haven't been so active this month owing to pressure of business, but I have written some dope on dummy antennas, published next month, and I'd advise all you fone fellows to have a good read, and act accordingly! What the use of pumping out records. You may get a kick out of it; nobody else does! Also, if you want to talk to yourself, use the dummy, because nothing sounds worse than some guy talking to himself, 1, 2, 3, 4, etc. They say it's the first sign—of course, I could be wrong. Anyway, I'll be seain' yuh!

78.

"AIR RAIDER."

### Bright Star Radio, VK3UH

517 LOWER MALVERN RD., GLEN IRIS, S.E.6, VIC.  
PHONE: U1218.

Crystals Ground from Best Brazilian Quartz and Tested to 50 Watts input to Penthode Oscillator.

Accuracy Plus or Minus 3 Kcs.

200, 160 Metre .. . . .	15/-
80 Metre .. . . .	10/-
40 Metre .. . . .	£1/6/-

Plug in Dust Proof Holders 7/6 each  
Satisfaction Guaranteed.

# *A Heritage of Quality*

## WESTON *Instruments*



Dependable Testing Instruments for  
Every Radio and Electrical Purpose

**WARBURTON FRANKI**  
LTD.

380 Bourke St, Melbourne, Phone Cent. 8888  
307 Kent St, Sydney; 233 Elizabeth St, Brisbane

## Arrangements for 14th Annual Convention Sydney, 1938

All Divisions of the Institute have now notified F.H.Q. of their delegates.

The following are the delegates and the approximate date of arrival.

Western Australia, VK6GM, G. Moss, 4/4/38; South Australia, VK5MD, E. Z. Barbier, 10/4/38; Victoria, VK3UK, V. Marshall, 3/4/38; Tasmania, VK7JB, J. Batchelor, 11/4/38; Queensland, VK4AW, A. Walz, 13/4/38; and from New Zealand, ZL2OV, L. G. Petrie, 8/4/38.

Other interstate visitors definitely include VK6JT, VK3WH and VK4WT, and we expect a few others.

The final programme of the convention has been arranged by the N.S.W. Division in collaboration with F.H.Q. and should provide the delegates and visitors with varied and interesting entertainment, the programme is as follows:—

**Tuesday, 12th April.—8 p.m.**, at Science House, Harrington street, Sydney, Official Opening. **10 p.m.** Delegates adjourn to first Business Session. Roll call and minutes of 13th Annual Convention to be read. **11 p.m.**, adjourn session.

**Wednesday, 13th April.—8 p.m.**, N.S.W. Division Annual Dinner.

**Thursday, 14th April.—5.30-7.30 p.m.**, Business Session. **8 p.m.**, Final Session of World Radio Conference.

**Friday, 15th April.—Delegates free all day.**

**Saturday, 16th April.—9.30 a.m.—**

**12.30 p.m.**, Business Session. **2 p.m.—5 p.m.**, Business Session. **8 p.m.**, Theatre Party.

**Sunday, 17th April.—Sports day, Wyong.**

**Monday, 18th April.—9.30 a.m.—12.30 p.m.**, Final Business Session.

Everyone in the Institute who has the well being of the body at heart must appreciate what this Convention will mean to the W.I.A. A delegate being present from each State provides the Convention with a power that it has not enjoyed for many years. Proxies at any time are unsatisfactory and those that have attended previous conventions well know the exceptional value of direct representation. The Institute has an opportunity at this Convention to consolidate its position as guardian of amateur radio in Australia. The visit of the New Zealand representative also provides an opportunity of closer co-operation between the W.I.A. and N.Z.A.R.T.

The social arrangements are being made by the N.S.W. Division and visitors upon arrival in Sydney should ring either W. J. Ryan, VK2TI, at W1263 or FX3305, or H. W.S. Caldecott, VK2DA at M.A. 6381 or Y.U.1039 and they will supply them with any information re the arrangements, etc.

The agenda items have been received from all Divisions and have been forwarded back for review to the Divisions.

### HAMS!!

Whatever your requirements see us first. We guarantee our prices to be better than elsewhere. Special attention given to country orders. We are Victorian Distributors for all Eddystone Products. Full stocks are carried, and we are always pleased to see you and show you these wonderful products. Write or call for a free illustrated catalogue. SHORT WAVE MANUALS, 1/6.

Crystals ground to specifications. Prices on application.

**P. & L. WIRELESS SUPPLIES**  
Pty. Ltd.

31 HARDWARE STREET, MELBOURNE. — F 4323.  
(Open Friday Nights)

## Correspondence

---

The Editor "Amateur Radio."

Dear Sir,

I am an old timer at the ham game, and still very interested—but I am sorry to say of late it is not a hobby one could be proud of. It seems to be just a habit and not to be compared with the years of 1920-1927. It is nothing unusual to read in our worthy mag, "Amateur Radio" about a new ham using a 6L6 driving a '45 or a 6P6 and a hertz antenna, works a few Yanks the first time on the air. Marvellous! Well, the whole thing is too simple, no effort to try something different on the lines of 1920 when the only valves obtainable were triodes and antenna one usually guessed and they did work. I can't understand why some of these so-called hams don't try and use such valves as '47 or '10 or '46, and, in fact, they will say they have never heard of such valves. Of course this idea will be laughed at, but are we not supposed to be experimenters? Why not get off the beaten track? In the course of some conversations with old timers this subject was mentioned and in a sort of a way their views were in accordance with the writer's and I do know that quite a few have given up ham radio because of the follow the leader style. It is pitiful at times to see some of these hams when Class "A" in a P.A. in transmitter is mentioned to them and they tell you that there is no such thing. Speaking of triodes Type '10 the writer knows of at least three broadcasting stations that still use '10 but of course not in Class "A." Another amusing subject is keenness to get to the 'phone and when on 'phone the key is hardly ever used. In fact the writer overheard a remark from a 'phone station that he had thrown his key away! Being interested in 'phone work I listen very carefully to this subject and the queer ideas of voice transmissions is certainly disgusting and in fact about 95 per cent. want to learn elocution. What about the W.I.A. forming a class for the subject? Quite a few forget to open their mouths and when they do all we hear is—my

handle is or hokey doke, come in someone and what say someone. It would do them a world of good to listen to some of the 200 metre "gang" and take a lesson from them. This idea of six months probation is too short and should be twelve months and then to be examined in the method of using fone. As for 'phone transmissions both voice and musical tests—to my mind it takes a lot to beat the "boys" on the 200 metre band.

"OLD TIMER, 1919."

Comley Vale, N.S.W.,  
16/3/35.

The Editor "Amateur Radio."

Dear O.M.,

Once again I ask space in your f.b. mag. to say something about the growing pirate menace. These "low-heel" fellows are not satisfied to work VK, but have to go in for DX in a big way. It must be very hard for a DX man who works a pirate for his first VK. I for one am receiving QSL's from DX countries re Q.S.O.'s worked by a pirate and I am not the only one. It costs me considerable money returning these QSL's to the senders for if I don't it means discredit to my call sign. To QSL DX worked by pirates is not playing the game. I am not the only victim—many other chaps suffer also. Usually fone is used by these pests, but in my case R.A.C. CW! In my opinion the pirate who, knowingly, uses a licensed call to cover his filthy deeds is low enough to crawl under a snake with a top hat on! I recently QSO'd VK2AHC 3.5mc and VK2AIP 7mc, both of which I believe were pirates using licensed call, as, when asked simple questions for confirmation of their licence, they could not answer. I also understand VK2AHI was used by a pirate. I have also been called by 2AND, 2AZF, 2AZR, 2ALG. I returned the call and sent QRU, the usual signal pirates get from here. It is surprising how many licensed hams answer these calls; surely they speak for themselves and

(Continued on Next Page.)



## Victorian Northern Zone Phone Section

By VK3PS.

February 27th was the day appointed for a Victorian Five-Metre Field Day, and arrangements were also made for the northern VK7's to be standing by. A good muster of stations kept on the job all day, but the results could have been better.

The palm for keenness must go to 7AB-7QZ and 7BQ and his second op. Jack Hopwood. Both of these groups took up their respective positions on the Saturday, and although the former, accompanied by 7AB's YF, slept in shelter, the latter slept under the stars, and both parties were at work at 0600 preparing the gear.

7AB contacted 3PS on 40 metres, as scheduled, at 0930, and these stations maintained hourly contact on that band during the day. 7BQ did not take 40 metre equipment with him, but telepathy must be associated with radio, for during the afternoon 3PS chanced to turn on the 40 metre receiver to hear 3EN calling him. The latter had a message that 7BQ wanted to contact on 40 metres. This was done, and it was learnt that, not having success on 5 metres, 7BQ had built a 40 metre transmitter, using spare parts and VIR for coils, and was putting over quite good phone at about R5-6.

On five metres 7AB was using a 4 stage crystal job with 100 watts C.W., 80 watts tone modulated and 30 watts phone, but unfortunately his signals were not heard in VK3, nor did he hear any signals except from 7BQ.

Of the VK3 gang, the 3VH-3JO combination at Mount Donna Buang put up the best performance by working 30T at Mt. Tarrangower over 103 miles and 3BW at Portarlinton. They also heard all other stations that anyone else heard.

30T again heard 30F from Foster, 164 miles away, and on this occasion at better strength than on the previous field day. Unfortunately Frank (30F) had a new receiver which had not been properly tested and he heard no signals at all.

3DH once more took up a position on Mt. Dandenong, and carried out

interesting antenna tests with 3UK, 3PS and 3VH-3JO.

3BW went to a high point near Portarlinton, his home town, and worked 3ML, who was mobile in Queenscliff district, and 3VH-3JO over a distance of 64 miles. He was also heard in the metropolitan area by 3PS, but did not work him. We hope that we shall hear more of 3BW and that he will have regular contacts with the city on 5 metres.

3ML was trying out various locations around the Queenscliff district; very little was heard of him, and he worked only 3BW. Nothing was heard of 3XW at Arthur's Seat, 3UH at Kinglake and 3HZ at Warragul.

Of the metropolitan stations, 3UK and 3PS were on all day, and worked 3DH and 3VH-3JO only of the portable stations. 30J was on at times under his own call, and also from 3JO's home station, and 3XM was also about at times. Although not taking part in the field day, 3JD, 3ST, 3FB and 3ZW were also heard on the band.

As the summer is practically over, it is unlikely that more field days will be held for about six months, but the five-metre gang will be busy building and testing better equipment for future tests, and in his last contact with 3PS, 7AB said that the Launceston gang would be organising further attempts to contact VK3, and the Victorians will be only too glad to co-operate in any tests that the VK7's suggest.

---

### (CORRESPONDENCE (Continued))

2ALG uses tone. A simple question sent about 15 w.p.m. bowls them over. If any ham working me is asked to supply proof of his licence he will understand why. Of course we have the other sort of pirate, the legal one, the second operator without an A.O.P.C. It is about time this practice was stopped. Any fellow desiring to obtain his certificate need not have the illegal use of someone else's station to do it. If we allow any fellow on the air without an A.O.P.C. why have any exam at all? Well, what about it, chaps, you who have had your calls used by these pirates?—Yours for radio,

LES. S. C. TANNER.  
V.K.2ABL.

## 28 and 56 M.C. Notes

By A. Pritchard (VK3CP)

Conditions on ten metres indicate two rather definite skip distances, and often show a short skip for a few days, then a long skip correspondingly. These conditions give bad phase distortion on many r9 plus ZL phones—being especially pronounced on ZL4GM. Phones from the States are r8 the first over, and in many cases completely fade out by the next. The Europeans have shown up in large numbers, as we expected, and the band is very interesting at present. VU2FV, VU2AU and VU2CQ have excellent sigs.; the former has had many r9 phone qso's with 3BQ and 3YP during the evenings. The A.R.R.L. cw contest has brought many Central and South Americans to 10 metres, although unfortunately for us they are only qso W. LU9AX and LU7AZ were r9 at 3YP on 12th March at 8-9 a.m.; also HK3JA at 9.45 a.m. the following morning. At 3BQ, PY3BP was r8 at 8.80 a.m. on the 13th March. Many others qso W are OA4J, LU9BV, LU5AN, K4KD, PY2AC, PY5AZ, CO2JV, XE1A, XE1AM, HK1JB. The rotary beam at VK3BQ is giving excellent results and Max has had many fine qso's as the following list shows:—OK2OP, OK2RM, OK2PY, YM4AA, OH7NC, G6DH, G2HX, also ZH6S and ZS1AN, the former with a T20 final and the latter a T55, both using 66 foot Zepps. ZS6AJ and ZB1C are on the look-out for us between 6 and 7 p.m. each evening. At VK3YP Patto has been hearing some rare ones—LU4EL, 28150 kc, LU3AX 28180 kc, YV5AA 28250 kc., also a two-way phone contact with G5VM on the 20th February at 10.15 p.m., r7 each end. At VK3CZ Arthur has made changes, and the line up is now EL3 tri tet 40x, 807 doub, 10 mx driving the 800's. On phone the final is run class BC (cathode bias, no by-passing condenser, and external bias, giving twice theoretical cut off). The modulator has a D104 xtal mike into a 57, 56 and 2A5. An 8JK flat top beam is also in operation on the States—25 deg. N. of E. VK3NW is

also on 10 with a rotary beam similar to 3BQ's. W6NWK is an interesting phone, being a portable mobile on board a boat going to French Indo China. He was qso'd here at 3CP when 1700 miles west of Honolulu; his 16w input final, a 6L6 co, 6L6 PA combination giving r8 phone; the modulator has a 6N7 class B; antenna is a single wire to the top of the mast and his sigs. were r8 at 3.30 p.m., Sunday, 18th March. Evidently there are a few Japs left! J3FJ, J2KN, J2IM being in the cw contest; the former is r8 at 11 a.m. during the week-ends. K6LCV, our most consistently r max phone, 2000V. at 400M, finds at 1KW input his EO1 feeder cable exudes tar and molten rubber. HI! A Johnson Q is ready for erection. WIEMP at Walla Walla has been giving 160 metres DX to VK's, re-broadcast on 10 from many up to 400 miles distant. KA1AA and KA1YL are good contacts for 10. Sunday, 18th March, G6MC, OH5NF, OE3AH, LY1J had exceptional strength at the VK's and were easy contacts. We have heard several VE stations lately—VK4RO, VE5GQ, VE5QP, VE3HP, VE4AW, VE4GD, VE4ZC, VE1BT have good strength around 7.30 a.m. K7FNE and K7GDL are excellent phones, also a few more K6's, K6NTV, K6PLT. VK4HR was heard here at 3CP at midnight, 13th March, at good strength, which is unusual at that time. VK2TI, 2VN, 2NY, 2ADE—T5 note (?), 2UI, 2RA appear to be doing well in the contest by the number of W's calling them, as well as VK3IW. The last 5 mx field day gave some powerful sigs. from VK3UK, 3PS, 3LL and 3JO. The UHF notes will probably give all the details. Flash, Tuesday, 15th March, at 6 p.m., W6PBL, r7, W6UD r6, W6GK cw and W6CHE phone r6, 20 metre harmonics, showing very strange conditions. I would again ask all VK's in all States to send me information regarding their tests, etc., because unless the skip is very short a contact is not easy on 10.

(Continued from page 10.)

view widely held in North America, that abnormally strong ionisation in the E region may occasionally enable the transmission of signals on the ultra high frequencies over distances about 500 miles to 1000 miles. The strong evidence furnished that the existence of a refracting medium in the F regions is essential to trans-oceanic communication on 28MC, even though lower frequencies may satisfactorily be propagated over similar distances from the E region, would seem to indicate quite clearly the importance of F region ionisation in any attempts to span the oceans on five metres. The success of such attempts can apparently only be expected when the ionisation density in the F regions is great.

(Continued from page 7.)

- C, C5—Radiokes MC1.
- C1, C7—23 plate Midgets.
- C2—.0001 Mica.
- C348—.01.
- C6—7 plate midget.
- C9.—2 50mmfd. Isolantite Midgets ganged.
- C10.—.002.
- C11.—100 mmfd. double spaced.  
(See text.)
- Nc.—7 plate midgets.
- R.—100,000 Ohms 1 watt.
- R1—25,000 Ohm Voltage Divider.
- RFC—Radiokes 3-21 type.
- RFC1—Midget Radiokes Choke.
- RFC2—6 turns 14 T.C., stretched out to 1½ in., 3/8th in. diameter.
- SW.1—5 amp 240 volt switch.
- SW 2, 3—1 amp 240 volt toggle switches.
- Torch lamp fuse, 6 volt 40 ma
- Cycle tail light bulb.

**SUPPORT YOUR  
ADVERTISERS  
AND MENTION  
AMATEUR RADIO**

## TRANSMITTING CONDENSERS

These Condensers will be on display at the Institute on the

First Tuesday in April.

Just arrived—a new shipment — Frequentor Transmitting Condensers with ½ in. diameter removable shafts. Silver plated plates, double spaced. Frequentor non-hydroscopic end plates.

3000 Volts Working.



## Frequentor

### Condensers

Type 400, .00025.	List Price,
70/-T*	
Type 400, .0005.	List Price,
77/6T*	

## Midget Type

Midget Type Frequentor Condensers as described above are available in the following capacities:—

.000025 . . . .	List Price, 10/6
.00005 . . . .	List Price, 11/6
.000075 . . . .	List Price, 12/6
.0001 . . . .	List Price, 13/6

## VEALLS

Wholesale Dept.:

490 ELIZABETH STREET,  
MELBOURNE.

243 & 168 Swanston St., Melb.;  
299 Chapel St., Prahran; 3-5  
Riversdale Rd., Camberwell;  
99 Puckle St., Moonee Ponds.  
F3145 (6 lines).

## QSL Bureau

(R. E. Jones, VK3RJ, Federal QSL Manager.)

The address of the Swiss QSL Bureau has been changed to U.S.K.A., Bern, Switzerland.

Through an error in QST confusing Austria with Australia, many VK cards enjoyed a trip to Austria, adding to the work of Willie Blascheck, the Austrian QSL Manager.

Bob Winch (VK3OA, ex VK2OA) has forsaken the salt atmosphere of Flinders Naval Base for more pleasant surroundings in South Yarra.

Gordon Weynton (VK3XU), of Castlemaine, reports an average increase of two R points through the use of a flat top Beam on U.S.A.

W5FSW (Robert Beaty, of Okla. City, Okla.), is keenly desirous of receiving a VK QSL. Though he has had many VK contacts none of his cards have been acknowledged.

Despite the intense local QRM, VK3GP has increased his DX total to 17 countries. This tops off VK3CX by one country.

The VK2 division have drafted and distributed a new and complete set of rules governing the VK2 QSL Bureau. This should result in a smooth and expeditious handling of QSL traffic and lighten Jimmy Corbin's labours. Other alterations avoid the fear of further threats of "legal proceedings" for the detention of cards. HI!

Melbourne hams look forward with pleasure to meeting Ken Ran-

kin (VK3KR) at his new post with A. G. Healing Ltd.

XU7CK, writing under an unintelligible signature, states: "It gives me great pleasure to say that I am living in a quiet and peaceful city, with no hostilities." He kindly offers to help QSL distribution in China during the troublous times, and his QRA is Tai Ping Shan, Foochow, China.

Many cards of appreciation have been received from U.S.A. during the past months. This indicates that the distribution facilities are working well in that region.

A few recent callbooks are on hand at bargain prices. Write the QSL Manager.

With the change in the season, the Jones bath heater is demanding more fuel. Failing a claim by April 20th cards for the following will supply a few thermal units:—3BL, BS, DS, DU, ES, EZ, FM, FN, GB, HT, LS, NT, OX, PA, QM, RE, TQ, UF, UJ, XG, ZO.

Cards for the undermentioned VK3 stations will find a home on receipt of a stamped envelope:—3AB, AP, AT, AX, BE, BJ, BN, CA, CC, CH, CU, CV, DJ, DQ, DT, EA, EK, FA, FT, HB, HE, HP, HZ, IL, IR, JM, KM, KP, KY, LH, LI, LV, NA, NB, NG, NF, NE, NP, OU, PN, QX, RQ, SO, ST, SZ, TB, TC, TG, TY, US, VM, VK, VQ, VY, WH, WR, XA, XD, XE, XZ, YA, YF, YG, YM, YS, ZF, ZG, ZJ, ZW, ZZ, Craven Dyson, Treloar, Silverwood.

QRA'S of the following are required:—VK3CY, IF, IG, QO, QF, RZ, YV, ZT.

**RF COILS  
IF TRANSFORMERS  
B/F OSC. COILS  
R.F. CHOKES**

Obtainable from . .

**MELBOURNE.**

A. J. Veall Pty. Ltd.  
Homecrafts Pty. Ltd.  
Hartleys Pty. Ltd.  
A. G. Healing Ltd.



**HIGH FIDELITY  
AUDIO TRANSFORMERS and  
MODULATION  
TRANSFORMERS**

**ADELAIDE.**

A. G. Healing Ltd.  
Oliver J. Nilsen & Co  
Ltd.  
Newton McLaren Ltd.

**PERTH.**

Atkins (W.A.) Ltd.  
Carlyle Ltd.

**J. G. PARR (VK3OM), 90 Chapel St., St. Kilda, S.2. V. Win. 7280**

## DX Notes

(By VK3MR.)

All is quiet on the Southern front. The tumult and the shouting has died; in other words, the A.R.R.L. dx test is over! Our dear Editor seems content at last, although judging by the gleam in his eye and the way he grips his pipe between his strong white teeth someone is in for it, so it may turn out to be the calm before the storm. After all, I think I will put him on to some of you guys that promised to drop me a line and forgot all about it!

When an interstate visitor drops into a meeting of the W.I.A., the first question asked by some wag is, "What does he think of our beer?" The next question as a rule is, "How do conditions compare with those at his own gra?" He goes on to bemoan the fact that he can hear such and such a station working some rare dx stations, and he cannot even hear a sign of it, etc., etc., making out, of course, that conditions are different in each State. Are they? If so, when, where and why? Do certain States only hear the dx a bit sooner than the others, and these other States work the same dx a little later? Or is it so that some of these rare dx sigs. rarely wander into the rxs of hams in these States? How are you going to prove this problem without years of investigation on your own? With a little co-operation between States we can clear this matter up for once and for all time. The main two continents that cause all the trouble are S. America and S. Africa. Now the idea is this—if a careful watch is kept by several hams in each State on 14mc to start with, from about 7 p.m. E.S.T. to midnight during the week days and from 3 p.m. to midnight Saturdays or Sundays and a special watch for the South Africans after midnight at least one night a week, and all this be sent to a State representative who will analyse it and pass it on to me for final check, then we will have something to work on, and the chaps in Hobart will know that perhaps their rxs are not the best, or the S.

Africans that were reported in VK3 at such a date and time were not audible in the south of Tasmania. Also the VK6's on reading that a whole pack of LU's or PY's were heard and worked on the east coast will be able further prove that they are in a real bad spot. VK4RF will act for VK4 and VK2DG has offered to the job for the "coal lumpers" (I'm sorry om, I forgot you worked in the flour mill!). Hi! Anybody interested please drop me a line. Then there is the most interesting question—Why? That's another story.

Contests.—All band cw test just over has produced a contest winner in VK5 (nothing ever happens over there!) Joe (5JT) claims a score of 1120 points, which is a fine effort, and overshadows that of 7AB, who was considered the winner. Joe, OM, what did you work to get that score? BERU Senior: Only scores to hand are—4BB, 780; 4YL, 700; 2TF, 620. What did you get, Ivan? Out with it, so as we can congratulate you on winning the trophy for keeps. 4BB well up, as to be expected in the Junior with 700, and 2HZ and 2VN had a battle which ended in 2VN beating 2HZ by 32 points—2VN 549.

Very few scores to hand from the big battle of brass. 2ARE seems to be well in the front with some 50,000 points. 2TI has 391 contacts in 34 dists. Anybody work over 650? (3MR enquiry).

DX.—The BERU was responsible for some real rare stations such as the following reported by 2DG — VP1WB, 14400 kc. T8 chirpy, and VP1RB. Send cards to Box 80, Belize, Bri. Honduras. VP2AT 14400 T, and VP2GA 14300 kc. Here's a rare one, VO3X, 14410 kc, T9 very consistent, and VP9L 14390 kc. Makes me wish I was in the test! Is CR10ZS the correct call? Some report it as CR10WES. Three cheers, 3CX has at last landed a YR! He

told his YF to go to!!!—bed, and he stayed up after 10 p.m. and risked domestic discord to do it. All for the sake of science! The novelty of married life must be wearing off now, Alan! Once again I ask, how many can beat 3CX for number of countries? His total is now 115. 73 to all. Snow.

### New Valve Releases

Amalgamated Wireless Valve Company Pty. Ltd. have announced the following new valves and advised that stock is available of type 1612 non-microphonic all metal pentagrid amplifier.

**Radiotron 884.**—Gas triode similar in electrical characteristics to 885, but having a 6.3 volt heater and an octal base.

**Radiotron 1801** "Kinescope" or cathode ray tube for television. This tube has a screen diameter of 5 inches and gives a yellowish picture. Electro-magnetic deflection is employed.

**Radiotron 814.**—Beam power tetrode with 50 watt plate dissipation suitable for transmitting purposes.

**Radiotron 6ZY5G** is an indirectly heated full wave rectifier with a total heater current of .3 ampere at 6.3 volts. It is suitable for use in automobile or 6 volt battery receivers and is intended for use, particularly with non-synchronous vibrators.

**Radiotron 6AC5G.**—High mu triode for Class B output. Maximum plate voltage is 250 volts.

**SUPPORT YOUR  
ADVERTISERS**



AND NOW——

THE

## Radiotron Battery Seven

**A WORTHY COMPANION TO THE A.C. RADIOTRON EIGHT  
RF STAGE — HF OSCILLATOR — BF OSCILLATOR — BUILT IN  
SPEAKER — BAND SPREAD — ECONOMICAL — A RECEIVER YOU  
WILL BE PROUD TO OWN.**

**COMPLETE KIT OF PARTS.**  
Including Wound Coils, Speaker and  
Radiotron Valves.

Write for Detailed List of Parts for the Radiotron Eight.

**COMPLETELY ASSEMBLED AND TESTED, £21/-/- Nett.**

**PRICE'S RADIO SERVICE**

(D. G. McINTYRE)

**5 and 6 ANGEL PLACE, SYDNEY.**

**£16/17/6** Nett  
F.O.R.  
Sydney

## Divisional Notes

---

To ensure insertion all copy must be in the hands of the Editor not later than the 18th of the month preceding publication.

---

### N.S.W. Division

---

W. G. Ryan, Secretary, VK2TI,  
Box 1734 JJ, G.P.O., Sydney.

#### Country Zone Officers.

Zone 1 (Far West).—J. Perooz,  
VK2PE, Hope Street, Bourke.

Zone 2 (North-West).—H. Hutton,  
VK2HV, Byron Street, Inverell.

Zone 3 (North Coast).—R. J.  
Berry, VK2NY, 54 Bacon Street,  
Grafton.

Zone 4 (Hunter River and Coal-  
fields).—R. W. Best, VK2TY, 57  
Hunter Street, Newcastle.

Zone 5 (South Coast and South-  
Street, Albury.  
West).—R. Ross, VK2IG, 673 David

---

The Division's financial year ended on February 28th, and the annual report shows a very satisfactory state of affairs. During the past two years membership of the Division has increased 75 per cent., and the finances have improved by nearly £40 since February, 1937, excluding the State Government's grant of £100 for the 1938 VK-ZL Contest.

Members of the Division have been active in all phases of amateur work, and generally the year has been most successful.

At the February general meeting, Mr. G. Beard described the transmitters and collapsible aerials designed by him for portable use in the Railway Department's service trucks patrolling H.T. transmission lines.

A member of the Divisional Council—Hr. H. Meyers, 2VN—has ac-

cepted a position on the Federal Executive, and Messrs. Corbin (2YC), Knock (2NO) and Pinnell (2ZR) were unable to accept nomination for re-election this year, so that there will be several new members in the 1938 Council. The above gentlemen have rendered splendid service to the Division in the past, and it is to be regretted that they cannot continue as Council members. The election of officers for 1938-39 will be held under the new system of ballot decided on at the last meeting.

Few of the Sydney hams took much interest in the W-VE Contest, but 2TI (41,000), 2RA (34,500), and 2ADE (score not known) have made a very good showing. 2QL and 2NY were also active.

In spite of the warning of the A.R.R.L. against off-band operation and bad notes, quite a few participants were guilty of these offences. This is particularly unfortunate in view of the imminence of Cairo.

2RA heard VK4AW, 4HR, 5KO, 6FL, 6SA on 28 mc., and wants to know why they weren't audible in the I.R.E. Contest!

Conditions generally seem to be improving, and the prospects for DX are good on all bands.

We are looking forward to meeting the interstate delegates to the W.I.A. Convention, and hope that their stay in N.S.W. will be an enjoyable one.

As Mr. H. Peterson (2HP) will be unable to attend the Convention, this Division's delegate will now be Mr. W. G. Ryan (2TI).

## Victorian Division

### COUNCIL NOTES.

Meetings of Council were held on 8/3/38 and also 16/3/38. In order to lessen the burden on the hon. treasurer's shoulders it was decided to appoint a separate treasurer for "Amateur Radio" and also an assistant treasurer for general divisional activities.

The second meeting of Council was devoted to discussion of the various items on the agenda for the Federal Convention.

### KEY SECTION NOTES.

#### (ByVK3HK.)

Our March meeting was very well attended and ended with interesting lectures on portable 56mc gear and antennae for 14, 28 and 56mc. Well, here's some doings from the boys.

**2BQ.**—A new xtal-saw is well on the way, also new freq. meter and multi vibrator. Antenna is now two  $\frac{1}{2}$  waves in phase rotating, up 40 feet and brings R4 carriers up to R9 when swung into correct position.

**3CZ.**—New recvr already has come down to 28 mc for good. Too much bedlam on 14 mc.

**3IW.**—Now finally pacifying the bels and working a few on 28 mc.

**3UM.**—Fed up with 7 mc QRN so down on 14mc. working some dx, hi. Also rebuilding freq. meter.

**3ZU.**—Still on 7mc with qrn and keeping w's out of bed.

**3ML.**—Busy planning 56 mc xtal portable rigs.

**3KR.**—Changed gra. Active on 7 mc only.

**3UH.**—Just installed 100 kc xtal bar for frequency measurement.

**3SQ.**—Swotting for B Class ticket.

**3YG.**—Dit.

**3UT.**—Recently returned from VK2 where he was a competitor in the British Empire Games.

**3DM.**—Been off air for a while, but shortly expects to work dx if a tube for the final can be found.

**3RX.**—Has new W8JK beam on 14mc and worked ZS, ZB, SV, I7 and Yanks. He swings it once a fortnight to get a new batch of stations!

**3CX.**—Is on 14mc working usual dx. He is teaching the new locals to build "bugs" unfortunately.

**3MR.**—Has been in Tassie. Met 7YL and thinks YL's are fb. See the nice things she sez about you in Tasmanian notes.

**3ZY.**—Lighting lamps in doublet feeder on 15 watts. "Watts" in a doublet?

### PHONE SECTION.

#### (By 3CB.)

Usual attendance of the 200 metre gang and no slackening of interest. In fact, since the increase of power, transmissions are getting stronger and improving generally. Lectures are freely given and also descriptions of stations and at least every member does his duty by detailing his station or some feature of it for the benefit of other members. An interesting lecture was given by 3PA on his transmitter and system of modulation (Hawkins BC system) and was enjoyed by all.

Those who have heard 3PA's mid-day session will agree that it is a jolly fine transmission. At our next meeting 3ZB will describe and illustrate his short wave transmitter and anyone who cares to come along will be welcome. 3AM, now in Caulfield, and 3BY are both up to their usual standard, the former on increased power.

3RI likewise on usual late Saturday-Sunday transmission. 3ZB active on 20, 40 and 200, and excellent transmission. 3GY quiet. 3DH and 3HK active on all bands and 200 metres on Sunday. 3CB is increasing power to a 5 stage rig, but only gradually. 3FL has a moto-bike and is only on 80 metres with excellent Sunday transmission. 3FW is on with usual quality and strength. 3GK stronger with good quality. 3LN improving in strength and transmissions excellent. 3JR recently married but does not let this interfere with his usual excellent Sunday programme.

### U.H.F. SECTION NOTES.

#### (By 3JO.)

#### 56 mc Field Day.

Results of the field day held on 27th Februtary are covered in an article by 3PS in this issue. Members of the section agree that another



should be held before the winter months, but no definite arrangements have yet been made. The Northern Tasmanian hams are also enthusiastic and will be considered when arrangements are being made.

## North Suburban Hams Interested in 56 mc.

In the past, most of the active 56 mc hams have been located to the south and east of Melbourne, but this order may be changed soon if the indications of activity reported by 3OF are realised. 3OF was asked to give a talk on U.H.F. work at a gathering of the North Suburban hams; 16 turned up to hear him, and 3XJ, 3ED, 3OG have already been on the air and reported by 3OT.

### 3DH Hears Push Bike!

Operating with portable gear installed in his car, 3DH, while participating in a 4 way QSO one Sunday evening, was carefully searching the band for one of the weaker stations, when he was amazed to hear a noise in the receiver coinciding with the passing of a push bike. This was caused by the lighting generator and was found to peak just outside the band and was audible only while the cyclist was within 15 yards. What next?

The monthly meeting is normally held on the third Tuesday in every month which, in April, is the 19th and the first Tuesday after Easter. Due to the closeness of the holidays this date may be altered. If this is done, the alteration will be frequently broadcast on 56 mc.

## COUNTRY SECTION.

### (VK3UK)

There are three important matters to report this month. Firstly, regarding the Country Convention. As the Northern Zone organisation is further advanced than either of the other zones, they were anxious to have the first Convention held within their own boundaries. Thus they will be able to elect their office-bearers for the year immediately. However, as the Convention will be the first since the formation of the Country Section, it will be regarded more as a general Country Convention than as a Zone Meeting. For that reason Ballarat has been selected as the venue, so that it will be reasonably central for all Zone mem-

bers. The dates are the 2nd and 3rd April; a special dinner has been arranged for the Saturday night, to be followed by the business meeting. On the Sunday morning trips to the Ballarat Power House and the Studio and Transmitters of 3BA have been arranged.

In the Western Zone, 3HG (N. M. Templeton) has taken over the organisation and the position of Zone Officer. As an old and enthusiastic W.I.A. member, Neil is an ideal man for the position, and the Western Zone are fortunate gaining such an able leader.

Finally the Northern Zone Convention will be held during the weekend of 14/15th May at Warragul. Full details will be given in the 3WI weekly broadcasts and in the next issue of "Amateur Radio."

## EASTERN ZONE NOTES.

### (By 3DG-3PR)

3BR.—Last heard tuning up mo bike for VK4 hike.

3DG.—Rebuilt recr, xmitter next, getting it in trim for 80 mx when condx come good again.

3GO.—Graham busy with a pair of 45's in PP, so will make a decent noise when going o.k.

3IL.—Come on Bob, why the long silence? Writer looking for another of those fb chin wags with you.

3JZ.—A new Ham. Has not been heard as yet.

3LY.—Ron seen dusting up the rig, is that a sign of a comeback or have you lost something Ron ob?

3QB.—Has not been heard lately, Jack, must be hanging off until condx come good by the look of it.

3SS.—Keith getting rig tuned up on 80 mx when condx come good again. He is also going to VIS shortly we hear.

3DI.—Still talking of going QRO, but as yet no start has been made.

3EA.—Not heard lately.

3WE.—Bill is fed up trying to work DX on 20 so is back on 80 and 40 mx.

3HZ-3XZ.—Guess B Class station 3UL keeps these boys busy as have not been heard of late.

3PR.—Ragchewing on 40 mostly. It is hoped to hold the Eastern Zone Convention at Warragul on 14th and 15th May. Full info. next issue.

## NORTHERN ZONE.

(3ZK-3HX.)

Conditions on all the bands during the past month have been far from good. Static is very prevalent, due, no doubt, to the change in the seasons. 20 mx displays some dx in the afternoon and in the early morning.

Zone affairs are moving slowly along but with the Convention at the end of the month, and the section firmly established, intense activity will take place in this zone.

3TL.—Acting as key station for the zone skeds on Sunday morning does an excellent job. Treb's fone has improved wonderfully of late.

3BM.—Plus CQ machine Jean has been active mostly on 40 mx skeds with KR. Bruce has a new high frequency rig which he hopes to have in operation soon.

3OR not particularly active, but is heard active on 40 mx. Murray won a bet with 3KR.

3EC has replaced his 210 final with an E406 with excellent results, and first class fone. Working on 40 and 80 mx.

3KI is still living, but activity what, John?

3CE is heard occasionally, what about that V8, Roy?

3NN.—Herb has built a 40 mx rig and is getting the Amateur Battery Super.

3DW in Shepparton is not very active at the moment, but hopes to make a comeback.

3EP has been working a few Yanks on 40 mx c.w., and has built a cw machine which works FB.

3EF in Warracknabeal is on 40 mx fone with a strong signal.

2AHY in Balranald does an excellent job with 1½ watts on 80 mx. Formerly 3HP.

3DU better known as 3TC, is on the tube with his portable outfit.

3XB heard on 40 mx with a very nice 19x note.

3TI of Mildura has a very FB signal.

3IH still with the same outfit but not very active.

3ZK has rebuilt his speech equipment, putting the resistors and condensers on strips. Jim reckons that he will find a new noise.

3HX has lots of ideas for convenience, but they don't always pan out.

Well gang, those listed above are only a few of the Hams in this zone, and we can't write about you if we don't know what you are doing, so let's know.

## Queensland Division

(By 4UX.)

4NO has joined the ranks of the record grinders. Quite a surprise, o.m. Good stuff too.

4AB still manages to keep going on 40, very keen on jazz, hi hi. Wat sa Ramsay.

4TY is back on 40 with tons of DX to yarn abt. Makes me feel vy envious.

4RX es 4FE trying to convince present scribe that they have two quarter waves in phase. Still unconvinced, Arthur and Ron, hi! Said scribe promised to buy FE a much needed top set of teeth if he convinces me re his antenna.

4CD very inactive. Wat's wrong, Colin? Better buy a bomb and look for that ice factory.

4EC on 20 mx, still on wid 200 mx I believe. Rest of Rocky gang down on 20. 4PF very keen on W8JK beam. Writer thought it was a ship in port when seeing it first, hi!

4CL promises to make a noise in the near future on 40 with a pair of T20's modulated by 6L6G's. Don't be long, Joe.

4DO on 20 wen not QRL wid talkies. Has a vy fb rx. Yankee job

4UX still going strong. Recently put a 38 volt battery on the rig and wid input of 19 watt got R 5/6 on CW from 4NO. Some QRP, hi. Rig refused to go when only 12 volts was applied to it, hi. Otherwise better QRP. Rig here, 41/41/6L6G. Modulation 76/76/6A6. Reiss mike.

Hrd the U gang on 40 a few nites ago during W/V/E contest. Otherwise they are QRT as far as 40 is concerned.

4CW wrks DX galore on 40. Looking forward to being on fone. Vy fb flst to copy.

4RM. No news, but is mostly on 20. Watch up remarks chaps wen he's listening as he is a scribe also, hi. No YL's at my station now Bob, strictly a stag show, hi.

## South Australian Division

(By 5KL)

Members visited the Osbourne Electric Supply Works on Wednesday, March 2nd. Owing to the fact that the train left Adelaide on time, the attendance was small!

Mr. Pearn (5PN), who conducts the Countryman's Session on Sunday mornings, reports that 5BU is co-operating by relaying the programme on 80 metres. This will be for about three weeks only, due to lack of favourable reports on Sunday morning relays.

The same programme will be transmitted from 5BU on Monday nights at 8 p.m. Reports would be appreciated by 5PN.

At present 80 metres seems good. contacts with New Zealand are plentiful, with no static, or very little, for so early in the season.

You may be surprised to hear that 8TJ, who operates on 34.7 metres, is not an experimental station, and

anyone working him is infringing the regulations. In a recent chat with the R.I. we were also reminded that rebroadcasting of any type of broadcast station programme is prohibited. The P.M.G. Department will take action against any offenders, and views such infringements seriously.

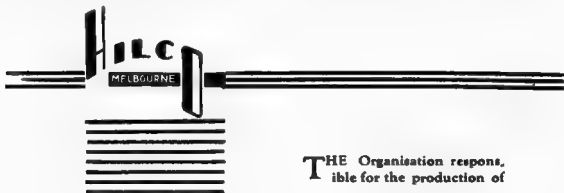
Now for some news that is news to all. Pitcairn Island is on the air! VR6AA. on approximately 14360 kc., makes an easy contact, as well as a new country (if you can get it!)

5FM is going to put up a Rhombic beam. Pete, seemingly determined to get out.

At Murray Bridge, Betty 5YL has now changed to crystal control with 10 watts input to a 38 oscillator and 42 p.a.

Stand by, boys, she will be on fone soon! VK5BF would give his bottom dollar, whatever that may be, to push a 5 metre sig. into Adelaide. (Why not put the rig on a push bike and keep pushing till they hear you, om? —3RX). Good luck, anyway.

Well, chaps, the end of the financial year is drawing nigh, and



**The Power  
Equipment with a  
Powerful  
Reputation**

**T**HE Organisation responds,  
ible for the production of

**Hilco Transformers  
Chokes etc.**

has proved its high standards  
for an article of extreme merit  
as accepted by the largest consumers  
in Australia.

**All Products Guaranteed  
for twelve months.**

**Hilco Transformers Proprietary Limited**

97-111 Berkeley St, Carlton, N.3, Vic. Phones F 1661-2  
CABLES & TELEGRAMS "HILCOY" MELBOURNE

# QSL CARDS?

## COMPLETE PRICES.

ONE COLOR Ink, on White or Tinted Board:—

250	12/6,	plus sales tax 6d;	£0 13 0
500	15/-,	" " " 7d.	0 15 7
1000	22/6,	" " " 11d.	1 3 5

TWO COLORS in Ink, on White or Tinted Board:—

250	18/9,	plus sales tax 9d.;	£0 19 6
500	22/6,	" " " 11d.	1 3 5
1000	32/9,	" " " 1/4d.	1 15 1

WE PAY POSTAGE.

PROMPT, EFFICIENT ATTENTION.

Write, enclosing Copy and Remittance to

**Elsam Printing Company**

1025 Whitehorse Rd., Box Hill, E.11, Victoria.

Printed to your requirements.  
We will submit samples and suggestions on request.



M.W.I.A.

**HAMS!** We can supply ALL your needs at the right prices—

Eddystone Parts — Power Chokes and Transformers — Tubes — Condensers — &c.

THE DAYS OF MOULDED-MUD HAVE GONE !

TROLITUL—the new High “Q” insulating material sets a new standard of efficiency for R.F. circuits.

Cut to any size for coil mounts, etc.

## WE SUPPLY

High Gain, High Q.I.F. Transformers, Trolitul Formers, Variable Iron Cored Inductances, High Frequency Coils on Trolitul bases to plug in.

**KINGSLEY  
RADIO PTY.  
LTD.**

316 LIT. COLLINS ST., C.1  
249-251 SPRING ST., C.1.

Phone Cent. 8461.

## VK3KC SAYS:

High “Q” in R.F. Circuits - Receivers and Transmitters - is essential. Trolitul, a workable material, meets these requirements.

## Amateur Radio

thoughts again turn to who will constitute the new Council and fill the padded presiding chairs at our meetings during the ensuing year. It is the duty of everyone to become financial, to nominate the best men for the positions, and to take part in the elections, with the fixed determination that whoever is elected will have your full co-operation and support.

See you all at the meeting.

### WAKEFIELD ZONE.

(By VK5RE).

5IV.—Roy has recently gained his commercial licence, and has been appointed radio postmaster in Northern Queensland. Congrats., and we hope that the change will be to your advantage—though we regret to see you go.

5LR.—Haven't heard a word from Jack for ages—let's have the doings, Jack.

5RE.—Very busy on the fruit and very little time for QSOing.

5BF.—Frank had some bad luck. First O.M. lightning visited him, at the expense of a valve or two in the receiver, and then 8 valves in the transmitter "blew up." Bad luck. But we are glad to see that you are still on with a 2-stager, and you're still grinning. That's the real "ham" spirit, Frank!

### BARKER ZONE.

(By VK5GW.)

5CJ.—Colin is rebuilding, and is waiting for the installation of 460 volts D.C. mains. The new rig is 89 E.C. oscillator, capacity coupled to a 6P6 P.A. The old rig was a 19 in a T.N.T., with about 6 watts input.

5BN.—Graham has 9 countries to his credit with about 15 watts input. Rig is E.C. 43 oscillator, capacity-coupled to a pair of 43's in parallel. Works from 200 volts D.C. mains on 40 and 20. RX is 6-tube superhet.

5TW.—Operator at 5SE. Tom uses a 45 in a Miessner circuit with 400 volts on the plate, from a rotary converter. Rx is 7-tube super.

5XR.—Heard with very F.B. fone calling CQ. Must have a punk Rx, Cam, hi! VK 4, 5 and 3 heard calling him, but Cam couldn't hear them.

5GW.—Building again. Is now trying to put three 6L6's together in an exciter unit while waiting for 5GR to build a 800-800 power tranny for final amplifier.

Glad to see Col. Bottrall, of Grey Zone, sticking at it. Hope to QSO soon, Col.

### GREY ZONE.

(By VK5WG.)

5FB.—Frank is back from V.I.S., and active again. Glad to hear you, O.M.

5LC.—Les has been on holidays, and on return installed 8JK beam with excellent results on fone DX. Received a report on reception of his 4 watts, 40 fx fone from New York. With same power he worked KA7AP on 20 mx fone, using a full wave Zepp antenna.

5LG.—Leith getting out on 14 mc and nearly WAC in 4 hours.

5TL.—Our new member, from Ceduna, is getting out very well, too. If you want a good rag-chew, call Tom.

Mr. Col. Bottrall still busy with amplifiers.

From Country Members' Representative on Council.

Well, chaps, no change of Zone Officers to report. The same three good men and true will carry on for a further twelve months. Please help them all you can with news of your activities.

Will those country members who cannot receive the Country Session on 40 mx Sunday mornings, please listen for it from VK5BV on 80 mx Mondays at 8 p.m.

## QUARTZ CRYSTALS

Every Crystal tested to 50 watts input to Penthode Crystal Oscillator  
Accurate grinding to .03 per cent. 3.5 M.C., 20/-; 7 M.C., 30/-  
100 K.C. Xtals. 465 K.C. Xtal "Gates. Prices on application

PROMPT DELIVERIES

MAXWELL HOWDEN (VK3BQ) CONS. RADIO ENGR.

13 Balwyn Road, Canterbury, E7.

## Tasmanian Division

(By 7YL)

The March meeting of this division was held on the 1st inst. "Pop" (7AH) presided, and the hon. secretary propounded the business for general discussion. It has been decided to hold a 5MX Field Day soon in the vicinity of Howden. I guess it will be 5MX History (?) by the time these notes appear in print. Anyhow, we intend to have a good time.

Later in the week the members of the council met at 7AH's residence to discuss the pros and cons for the agenda paper.

VK7LZ.—Doing a spot of dx in spite of recent sun spots judging by arrival of inward QSL.

VK7AB.—Congrats. on winning the I.R.E. Trophy, Doug; nice score. Guess you used up some aspros.

VK7RK and 7 KR.—Attempting to persuade Henry, 7HY, to instal a new "inspiration" in the shop.

VK7RC.—Recently visited VK3, and had a good time. Replaced the RK-20, Ron?

VK7DH.—Doing a good job as traffic manager. Beware of Snowy's (3MR) stories, Dave!

VK7JB.—"Buck" is greatly anticipating trip to Sydney as VK7 representative. Intends coming back via VIM. At present mourning the loss of a 50 tube. No flowers requested.

VK7KV.—Going musical—believe it or not. Wanders from bar to bar. Literary effort every month took a back seat.

VK7CM.—Now W.A.C. on qrp, having raised long-awaited African during S.A.A.R.L. Contest.

VK7PA and 7AL — Gave QST Manager some work recently with big batch of brand new cards. 7PA temporarily absent from 200mx band.

VK7JH.—Nothing heard of Jack at Waddamana. What say?

VK7CL.—Now located at Devonport. On High School staff. Hear lots of dx calling you, Merv.

VK7QZ.—Working some choice dx with pair of Taylor tubes and numerous watts.

Nothing heard of 7LC. Probably new gra is affected by skip with VIH.

VK7YL.—Last heard calling 40 mx fone or cw on 20 mx. Any offers of a frequency meter?

Condolences to our Secretary, "Chum" Moorhouse, who is so busy he doesn't know which way to turn. Poor fellow.

VK7 was happy to welcome two VK3 hams in the persons of 3MR and 3CN (ex-7CH), the two "Snowy's." 3MR did quite a bit of constructive work and left many lasting impressions, including one dozen pea lamps at 7YL'S. Come again, Snow!

5mx transceivers operated by "Buck" (7JB) and Neville (7NC) considerably assisted the starter and judges in the aquatic events at the Royal Hobart Centenary Regatta.

## TRANSMISSION SCHEDULES.

APRIL, 1938.

### VK2ME, SYDNEY. Sundays.

Sydney Time.	G.M.T.
4 p.m.-6 p.m. ....	0600-0800
8 p.m.-midnight .....	1000-1400

### Mondays.

12.30 a.m.-2.30 p.m. ....	1430-1630
---------------------------	-----------

VK2ME, MELBOURNE.	
Nightly, Monday to Saturday (Inc.)	
Melbourne Time.	G.M.T.
7 p.m.-10 p.m. ....	0900-1200

VK6ME, PERTH.	
Wavelength 31.28 metres (9500 Kc's)	
Nightly, Monday to Saturday (Inc.)	
Perth Time.	G.M.T.
7 p.m.-9 p.m. ....	1100-1300

## Radio Operator's Death

WELLINGTON (N.Z.)

Known to many New Zealand and Australian radio amateurs as "Cousin Jimmy," who operated station ZL2JO at Ormond, Jimmy Parsons, died recently after having been crippled for fifteen years and blind for ten years. Though completely paralysed and without the use of his limbs, Parson devoted his life to radio. He was encouraged by his mother who turned the dials when required. Radio amateurs over a wide area donated money for parts for assembling a modern station which was operated under a licence specially issued by the Government.

## R.A.A.F. Reserve Notes

### THIRD DISTRICT. (VK3UK-3ZI.)

During the vacation that V.M.C. is having, members have been spending more time on experimental work. The main feature of interest during the month was the 56 mc Field Day, in which 3D4, 3ZI, and 1A1 took part. 1A1 was the only one of the three who was able to get away for the day, and he, accompanied by 3WG, went down to Pt. Lonsdale. However, the other two were able to make some excellent contacts from their home locations.

The matter of forgetting Procedure easily came up a few weeks ago, when three members were discussing the Reserve in general. Hearing another member calling CQ on 80, they gave him a call to try and settle the argument. After sending him two messages and supplying "fills" in one of them all without an error in Procedure on either side the point seemed fairly proved, especially as the present vacation has been in force since before Christmas. Although some of the finer points may slip one's mind, Procedure, once learned properly, is not easily forgotten, and even over quite a considerable period of time, only a few hours' consistent work is necessary to restore full efficiency again.

During the month quite a number of country members have been down or passed through the city, including 3B3, 3C4, and 3F9. The Ballarat Convention early next month will provide an excellent opportunity for a discussion on Reserve matters, as so many town and country members will be attending.

**Use the Hamad Column for anything you wish to Buy Sell or Exchange.**

**IT BRINGS RESULTS!!**

## Hamads

Advertising space in these columns is available to those wishing to sell, buy or exchange, at 1d. per line; approximately five words to the line. Minimum charge, 1/-. To ensure insertion enclose postal note or stamps with copy, and address to the Advertising Manager, "Amateur Radio," White Horas Road, Box Hill, E.11., Victoria.

**B**RIGHT STAR RADIO, VK3UH,  
517 Lower Malvern Rd., Glen Iris,  
S.E.6.

Crystals ground from best Brazilian quartz and tested to 50 watts input to penthode oscillator, as used by leading experimenters and DX stations throughout Australia; accuracy plus or minus 3 KC's.

200, 160 Metre .. ..	15/-
80 Metre .. ..	10/-
40 Metre .. ..	21/6-
465 KC Xtal Gates .. ..	22

Power transformers constructed to specifications. Receivers and Transmitters constructed.

Triad first quality 866 mercury vapour Rectifiers, 7,500 volts peak, 18/-; National type N Dials, £2 each; Taylor T20 Triode transmitting tubes, 20 watts plate dissipation. 42 watts RF output, price 30/- each.

Taylor T55 Triode Transmitting Tubes, £4 each.

Call or write above address.  
Phone U1218.

Satisfaction guaranteed.

**F**OR SALE.—7/8 tube super, Black crackle steel case, Metal tubes, Isolantite insulation throughout, beautifully built and a gift at £17 or offer, complete with 8in. permagnetic speaker and power supply. VK3KP, Randall Ayre, Rothesay Court, Sidwell Avenue, East St. Kilda, S.2. Win. 163.

**X**TALS by W9ADN, BT cuts, 3.5 mc, 20/-; 7mc, 22/6; XTAL MOUNTS, American, 8/6; R.F. CHOKES, 10/200 mx, 200 ma, 2/6; 5MX, 1/11; BUGS, VIBRO PATTERN, nickel plated, enamelled steel base, last lifetime, over 50 in use in Telegraph Branch, Melbourne, 35/-, plus postage; KEYS, P.O. pattern, nickel plated, 14/6, plus postage. VK3RJ, 23 Landale st., Box Hill, Vic.

# Are You a Member?

Subscriptions to the W.I.A. (Victorian Division) are  
as under:—

Full Member, 20/-. Associate Member, 16/.

Country—Full Member, 14/6; Associate Member, 8/9

Student Member, 7/6.

Entrance Fee, 2/6

Write to Secretary, Law Court Chambers, 191 Queen St., City



**T**RANSMITTERS, receivers and frequency metres constructed from Eddystone parts are ensured of high performance. VK3ML has built equipment from 56 MC transceivers to medium powered phone transmitters for many prominent stations on the air to-day. New facilities permit an expansion of operations in these directions, and quotations for the construction of specialised equipment can be given gratis. Years of experience with transmitting and receiving gear have made possible the production of solidly constructed and well engineered outfits. There are 105 Eddystone lines for you to choose from in building the new season's sets. Equip your station to-day with Britain's finest short wave components—Eddystone. Represented in Australia by

**R. H. CUNNINGHAM (VK3ML)**

94 ROBINSON'S ROAD, HAWTHORN, Vic.